

## REMARKS

### Summary of Office Action

As an initial matter, Applicants note with appreciation that the Examiner appears to have withdrawn the rejection of claims 21 and 22 under 35 U.S.C. § 102(b) as allegedly being anticipated by Beutler et al., U.S. Patent No. 4,404,388 (hereafter “BEUTLER”).

Claims 18-20, 28-33 and 35 remain rejected and claims 25, 27 and 36 are newly rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by BEUTLER.

Claims 21-23 and 34 are newly rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BEUTLER.

Claims 18-20, 28-31, 34, 36-39 remain rejected, claims 21-24 are newly rejected and newly presented claim 44 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bellon et al., FR 2,789,397 (hereafter “BELLON”).

Claims 25-27, 32, 33, 40 and 41 remain rejected and newly submitted claim 45 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BELLON and further in view of Snyder, U.S. Patent No. 4,708,813 (hereafter “SNYDER”).

Claim 35 remains rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BELLON in view of Saint-Leger et al., U.S. Patent No. 5,939,077 (hereafter “SAINT-LEGER”).

Claims 18-20, 24-28, 30-37 and 44-45 are (newly) rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Penska et al., EP 0 938 890 or U.S. Patent No. 5,851,544 (hereafter “PENSKA”).

Claims 21-23, 29 and 38-41 are newly rejected under 35 U.S.C. § 103(a) as allegedly being

unpatentable over PENSKA.

**Response to Office Action**

Reconsideration and withdrawal of the rejections of record are respectfully requested, in view of the following remarks.

***Response to Rejection of Claims under 35 U.S.C. § 102(b) over BEUTLER***

Claims 18-20, 28-33 and 35 remain rejected and claims 25, 27 and 36 are newly rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by BEUTLER. The rejection appears to essentially be a repetition of the rejection set forth in the Final Office Action mailed February 23, 2007 and additionally relies on Examples 5/Ia and 5/Ib of BEUTLER.

Applicants respectfully traverse this rejection for at least all of the reasons which are set forth in the Amendment under 37 C.F.R. 1.114 filed July 2, 2009. The corresponding remarks are incorporated herein.

It is pointed out again that the Examiner has failed to point to a single specific composition of BEUTLER which can be considered to be encompassed by any of the rejected claims. All of the Examiner's allegations in this respect are based on a combination of the disclosures from different passages of BEUTLER, which passages are not linked to each other. In this regard, reference is made again to NetMoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359 (Fed. Cir. 2008), which decision states, *inter alia*:

... Because the hallmark of anticipation is prior invention, the prior art reference—in order to anticipate under 35 U.S.C. § 102—must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements “arranged as in the claim.” Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 1548 (Fed. Cir. 1983).

The meaning of the expression "arranged as in the claim" is readily understood in relation to claims drawn to things such as ingredients mixed in some claimed order. In such instances, a reference that discloses all of the claimed ingredients, but not in the order claimed, would not anticipate, because the reference would be missing any disclosure of the limitations of the claimed invention "arranged as in the claim." But the "arranged as in the claim" requirement is not limited to such a narrow set of "order of limitations" claims. Rather, our precedent informs that the "arranged as in the claim" requirement applies to all claims and refers to the need for an anticipatory reference to show all of the limitations of the claims arranged or combined in the same way as recited in the claims, not merely in a particular order. The test is thus more accurately understood to mean "arranged or combined in the same way as in the claim."

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... In other words, we concluded that although the reference taught all elements of the claim, it did not contain a discussion suggesting or linking hydrazine with the mixed bed in the figure, and thus did not show the invention arranged as in the claim.

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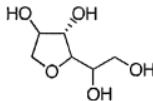
In all of these cases, the prior art reference had to show the claimed invention arranged or combined in the same way as recited in the claim in order to anticipate. We thus hold that unless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102.

Applicants submit that even if one were to assume, *arguendo*, that the combined features of Examples 7/2 and 4/2 of BEUTLER comprise all of the elements which are recited in the rejected claims, these Examples would clearly not disclose these elements as arranged or combined in the same way as recited in these claims. For this reason alone, the present rejection is apparently without merit.

With respect to the combined features of the compositions of Examples 5/Ia and 5/Ib newly relied on by the Examiner it further is pointed out that from the comments in page 3, first paragraph and page 5 of the present Office Action it appears that the Examiner is equating the Polysorbate 20 (sorbitan monolaurate) employed in Examples 5/Ia and 5/Ib of BEUTLER with emulsifier B as

recited in, e.g., present claim 18, i.e., a polyethoxylated fatty acid ester having a chain length of from 10 to 40 carbon atoms and a degree of ethoxylation of from 5 to 100 or an ester of a fatty acid having a chain length of from 10 to 40 carbon atoms and polyethylene glycol comprising from 5 to 100 ethylene glycol units.

Applicants submit that the Examiner is clearly mistaken in this respect. While sorbitan monolaurate is an ester of a fatty acid (lauric acid) and sorbitan, it clearly is neither polyethoxylated nor an ester of polyethylene glycol and lauric acid. In this regard, it is noted that sorbitan has the following structural formula:



Applicants submit that for at least all of the foregoing reasons and the additional reasons set forth in the responses to the previous Office Actions the rejection of claims 18-20, 25, 27-33, 35 and 36 under 35 U.S.C. § 102(b) over BEUTLER is without merit, wherefore withdrawal thereof is respectfully requested.

***Response to Rejection of Claims under 35 U.S.C. § 103(a) over BEUTLER***

Dependent claims 21-23 and 34 are newly rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BEUTLER. The Examiner concedes that BEUTLER does not disclose the ratios of emulsifiers A, B and C recited in claims 21 and 23 and the amount of gas recited in claim 34 but essentially takes the position that one of ordinary skill in the art would have arrived at these ratios and amounts by mere routine optimization.

Applicants respectfully traverse this rejection as well. In particular, as has been set forth above, BEUTLER fails to disclose a combination of emulsifiers A, B and C as recited in claim 18 (let alone in the total concentration recited in claim 18), and neither does BEUTLER teach or suggest that this particular combination of emulsifiers would be desirable. Accordingly, there is no apparent reason for one of ordinary skill in the art to optimize the relative ratios for this undisclosed combination. For the same reason, there is no apparent reason for one of ordinary skill in the art to optimize the amount of gas in a composition which contains a combination of emulsifiers A, B and C in the total concentration recited in claim 18.

It is submitted that for at least all of the foregoing reasons, the rejection of claims 21-23 and 34 under 35 U.S.C. § 103(a) over BEUTLER is without merit and should be withdrawn, which action is respectfully requested.

***Response to Rejection of Claims under 35 U.S.C. § 103(a) over BELLON***

Claims 18-20, 28-31, 34, 36-39 remain rejected, claims 21-24 are newly rejected and newly presented claim 44 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BELLON. The rejection appears to essentially be a repetition of the rejection set forth in the Final Office Action mailed February 23, 2007 and the allegations set forth in the Examiner's Answer mailed November 16, 2007 with the exception that the Examiner now takes a different position with respect to the meaning of "PEG-100 stearate glyceryl stearate" in Example 1 of BELLON.

Applicants respectfully traverse this rejection for at least all of the reasons which are set forth in the Amendment under 37 C.F.R. 1.114 filed July 2, 2009. The corresponding remarks are incorporated herein.

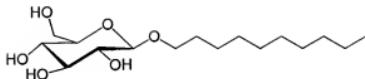
It further is noted that while in the Examiner's Answer mailed November 16, 2007 the Examiner took the position that “[t]he structure of PEG-100 stearate glyceryl stearate is  $C_{17}H_{35}-COO(CH_2CH_2O)_{100}(CH-CH(OH)-CH_2-OOCC_{17}H_{35})$ ” (see sentence bridging pages 13 and 14 of the Examiner's Answer), i.e., a single compound, the Examiner now takes the position that “PEG-100 stearate glyceryl stearate” actually is “PEG-100 stearate / glyceryl stearate”, i.e., a combination of PEG-100 stearate and glyceryl stearate (see page 6, beginning of last paragraph, page 8, last paragraph and page 9, last paragraph of the present Office Action).

Both interpretations of “PEG-100 stearate glyceryl stearate” proffered by the Examiner only have in common that neither of them is supported by any written (or other) evidence whatsoever.

Applicants further point out again that BELLON does not even discuss the compounds which allegedly correspond to the present emulsifiers A, B and C in combination, let alone as an emulsifier system, but mentions them separately and for different purposes, if at all.

It also is noted that from the comments in the last paragraph of page 9 of the present Office Action it appears that the Examiner takes the position that decylglucoside, a compound employed in Example 3 of BELLON, qualifies as emulsifier C as recited in present claim 18, i.e., a branched and/or unbranched, saturated and/or unsaturated fatty alcohol having a chain length of from 10 to 40 carbon atoms.

Applicants submit that the Examiner is clearly mistaken in this respect. According to, e.g., [http://en.wikipedia.org/wiki/Decyl\\_glucoside](http://en.wikipedia.org/wiki/Decyl_glucoside) decylglucoside has the formula:



and thus is an ether of decyl alcohol (and glucose).

Regarding the last paragraph of page 10 of the present Office Action it is noted that the Examiner has not provided any evidence whatsoever to support the allegations set forth therein such as, for example, that “[i]t is well known in the art of cosmetic formulations the concentration of each individual emulsifier that one would employ depends on the HLB values of the emulsifier i.e the number of ethylene glycol units, the length of carbon chain on the fatty acid etc. The concentration of the emulsifiers directly effect [sic] the final physical properties of the foam such as foam stiffness, emulsion stability, wetting properties etc.”

Applicants submit that at least for all of the foregoing reasons and the additional reasons set forth in the responses to the previous Office Actions, BELLON fails to render obvious the subject matter of any of the rejected claims. Accordingly, withdrawal of the rejection under 35 U.S.C. § 103(a) over BELLON is warranted and again respectfully requested.

***Response to Rejection of Claims under 35 U.S.C. § 103(a) over BELLON in View of SNYDER or SAINT-LEGER***

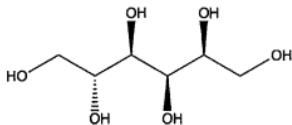
Claims 25-27, 32, 33, 40, 41 and 45 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BELLON and further in view of SNYDER and claim 35 remains rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BELLON in view of SAINT-LEGER. The

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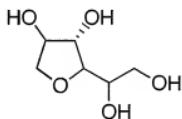
rejections appear to essentially be repetitions of the rejections set forth in the Final Office Action mailed February 23, 2007.

Applicants respectfully traverse these rejections for at least all of the reasons which are set forth in the Amendment under 37 C.F.R. 1.114 filed July 2, 2009. The corresponding remarks are incorporated herein.

With regard to the allegations at page 12, second paragraph and page 14, last paragraph of the present Office Action it is pointed out that sorbitan and sorbitol are compounds having significantly different structures:



sorbitol



sorbitan

In other words, even if sorbitan may formally be considered to be a dehydration product of sorbitol, the fact remains that sorbitol is a straight chain polyol (i.e., a compound having 6 hydroxy groups bonded to aliphatic carbon atoms) whereas sorbitan is a heterocyclic compound, i.e., a 3,4-dihydroxytetrahydrofuran substituted in the 2-position by a 1,2-dihydroxyethyl group (i.e., a compound having 2 hydroxy groups bonded to aliphatic carbon atoms and two hydroxy groups bonded to a heterocyclic ring). Accordingly, one of ordinary skill in the art would not expect these compounds (and derivatives thereof) to have (substantially) the same properties and to be freely interchangeable.

For at least the reasons set forth above and the additional reasons set forth in the responses to the previous Office Actions, withdrawal of the rejections under 35 U.S.C. § 103(a) over BELLON in view of SNYDER or SAINT-LEGER is respectfully requested as well.

*Response to Rejection of Claims under 35 U.S.C. § 102(b) over PENSKA*

Claims 18-20, 24-28, 30-37 and 44-45 are (newly) rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by PENSKA. The rejection relies particularly on Examples 6 and 7 of PENSKA which allegedly disclose all of the elements that are recited in the rejected claims.

Applicants respectfully traverse this rejection as well. In particular, it is pointed out that all of the present claims are directed to a self-foaming and/or foam-like cosmetic or dermatological preparation. According to the first paragraph of page 4 of the present specification:

For the purposes of the present invention, "self-foaming" or "foam-like" are understood as meaning that the gas bubbles (any) are present in distributed form in one (or more) liquid phase(s) where the preparations do not necessarily have to have the appearance of a foam in macroscopic terms. Self-foaming and/or foam-like cosmetic or dermatological preparations according to the invention can, for example be macroscopically visible and dispersed systems of gases dispersed in liquids. The foam character can, however, for example, be visible also

only under a (light) microscope. Moreover, self-foaming and/or foam-like preparations according to the invention are, particularly when the gas bubbles are too small in order to be recognized under a light microscope, also recognizable from the sharp increase in volume of the system.

Further, the second paragraph page 6 of the present specification states (emphasis added):

Compositions according to the invention develop, even during their preparation--for example during stirring or upon homogenization--fine-bubble foams. According to the invention, fine-bubble, rich foams of excellent cosmetic elegance are obtainable. Furthermore, preparations which are particularly well tolerated by the skin are obtainable according to the invention, where valuable ingredients can be distributed on the skin in a particularly good manner.

In contrast, there is no indication whatsoever in PENSKA that the compositions disclosed therein are self-foaming or foam-like. On the contrary, it appears that the carbon dioxide which is infused in the liquid fluorocarbon which is a component of the compositions of PENSKA is merely physically dissolved in the fluorocarbon. This is supported, e.g., by the statement in paragraph [0018] (EP) of PENSKA according to which “infusion of the carbon dioxide is done preferably until the fluorocarbon is totally saturated with carbon dioxide”. If a foam were to be present, the carbon dioxide would apparently have to be used in amounts which exceed the saturation concentration thereof in the liquid hydrocarbon.

Further support for the understanding that the carbon dioxide is merely dissolved in the liquid fluorocarbon and the compositions of PENSKA are thus not self-foaming and/or foam-like is provided by the use of the term “infused” in PENSKA.

According to Miriam-Webster's Online Dictionary (<http://www.merriam-webster.com/dictionary/infused>) “infuse” is defined as:

**1 a** : to cause to be permeated with something (as a principle or quality) that alters usually for the better <infuse the team with confidence> **b** : INTRODUCE, INSINUATE <a new spirit was *infused* into American art — *American Guide Series: New York*>

2 : INSPIRE, ANIMATE <the sense of purpose that *infuses* scientific research>

3 : to steep in liquid (as water) without boiling so as to extract the soluble constituents or principles

4 : to administer or inject by infusion <stem cells were *infused* into the patient>

— in-fus'er noun

**synonyms** INFUSE, SUFFUSE, IMBUE, INGRAIN, INOCULATE, LEAVEN mean to introduce one thing into another so as to affect it throughout. INFUSE implies a pouring in of something that gives new life or significance <new members *infused* enthusiasm into the club>. SUFFUSE

implies a spreading through of something that gives an unusual color or quality <a room *suffused* with light>. IMBUE implies the introduction of a quality that fills and permeates the whole being <*imbue* students with intellectual curiosity>. INGRAIN , used only in the passive or past participle, suggests the deep implanting of a quality or trait <clung to *ingrained* habits>.

INOCULATE implies an imbuing or implanting with a germinal idea and often suggests stealth or subtlety <an electorate *inoculated* with dangerous ideas>. LEAVEN implies introducing something that enlivens, tempers, or markedly alters the total quality <a serious play *leavened* with comic moments>.

Accordingly, it appears that the term “infuse” is used in PENSKA in the sense of causing the fluorocarbon to be permeated by carbon dioxide (see meaning 1 a above), i.e., that the carbon dioxide permeates or is dissolved in the fluorocarbon.

Applicants submit that for the above reasons alone, PENSKA is unable to anticipate the subject matter of any of the claims of record.

It further is not seen that in the compositions of Examples 6 and 7 of PENSKA the carbon dioxide is present at a percentage by volume of from 1 % to 90 % (see present claim 18). It appears that in this regard the Examiner is relying on the percentages set forth in paragraph [0019] of PENSKA. However, these percentages are not given for room temperature but are given for a temperature of 37° C (about 99 F) and even if these percentages could be relied on for determining the volume percentages of carbon dioxide in the compositions of Examples 6 and 7 of PENSKA

under ambient conditions it is unknown what the volume percentage of the fluorocarbon in these compositions (at 37° C) is.

Even further, even if one were to disregard the above facts it is not seen that PENSKA discloses the elements of rejected claims 25-27, 32 and 37 (component (c)) and 45. In this regard, it is noted that the Examiner takes the position that the glyceryl stearate present in the composition of Example 6 of PENSKA and the sorbitan stearate present in the composition of Example 7 of PENSKA qualify as hydrophilic surfactant/hydrophilic emulsifier. However, the Examiner has not provided any evidence whatsoever to support this assertion.

Applicants submit that for at least all of the foregoing reasons, the rejection of claims 18-20, 24-28, 30-37 and 44-45 under 35 U.S.C. § 102(b) over PENSKA is unwarranted, wherefore withdrawal thereof is respectfully requested.

***Response to Rejection of Claims under 35 U.S.C. § 103(a) over PENSKA***

Claims 21-23, 29 and 38-41 are newly rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over PENSKA. The Examiner concedes that PENSKA fails to disclose the elements of the rejected claims but essentially alleges that one of ordinary skill in the art would have arrived at these elements by a mere routine optimization of the compositions of PENSKA.

This rejection is respectfully traversed as well. It is noted that the present rejection is based on the incorrect assumption (see above) that PENSKA anticipates the subject matter which is recited in the claims from which claims 21-23, 29 and 38-41 depend. For this reason alone, the present rejection is necessarily without merit.

It further is noted that the Examiner's explanation as to why one of ordinary skill would allegedly be motivated to optimize the ratio and total concentration of emulsifiers in the compositions of Examples 6 and 7 of PENSKA does not have any basis in the disclosure of PENSKA. Even further, the compositions of Examples 6 and 7 both appear to contain a total of six emulsifiers and it is not seen why the "optimization" envisioned by the Examiner would involve only three or four of these six emulsifiers.

It is submitted that for at least all of the foregoing reasons, the rejection of claims 21-23, 29 and 38-41 under 35 U.S.C. § 103(a) over PENSKA is without merit as well and should be withdrawn.

**CONCLUSION**

In view of the foregoing, it is believed that all of the claims in this application are in condition for allowance, which action is again respectfully requested. If any issues yet remain which can be resolved by a telephone conference, the Examiner is respectfully invited to contact the undersigned at the telephone number below.

Respectfully submitted,  
Heidi RIEDEL et al.

/Heribert F. Muensterer/

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